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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/720,280	12/21/2000	Thomas Eckel	MO-6035/LEA-	1062
157	7590	04-26/2005	EXAMINER	
BAYER MATERIAL SCIENCE LLC 100 BAYER ROAD PITTSBURGH, PA 15205			SZEKELY, PETER A	
			ART UNIT	PAPER NUMBER
			1714	
DATE MAILED: 04/26/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/720,280

Applicant(s)

ECKEL ET AL.

Examiner

Peter Szekely

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 April 2005.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-15, 18, 20 and 22-24 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 2-15, 18, 20 and 22-24 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 2-15, 18, 20 and 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mitsubishi Chemical Corporation EP 0 728 811, in view of Bodiger et al. 5,849,827.

4. Both references have been discussed previously. The decision by the Board Appeals, dated 2/9/05, affirming the examiner states: "As correctly noted by the examiner, Bodiger (column 1, lines 51-56) discloses that 'an addition of extremely finely divided inorganic powders together with flame retardants in thermoplastic polycarbonate molding compositions produces a significant reduction in the burning times and hence a

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considerable improvement in flame proofing.' Moreover, Bodiger (column 8, lines 21-22) discloses that 'all phosphorus compounds conventionally used' may be employed as flame retardants. Based on those disclosures or Bodiger taken with Maruyama we agree with the examiner that one of ordinary skill in the art would have been led, prima facie, to employ the finely divided inorganic powders of Bodiger as an additive in the molding composition of Maruyama with the reasonable expectation that such an addition would have a favorable influence on the flame retardant properties of the molding composition of Maruyama." The decision by the Board of Appeal also states that: " Appellants maintain that one of ordinary skill in the art would not have been led to employ the finely divided inorganic powder of Bodiger in the phosphazene-containing molding composition of Maruyama because Bodiger does not explicitly list or describe phosphazenes as being the flame retardant that is used in combination with a finely divided inorganic powder for enhancement of the flame retardant effect thereof. In advancing that argument, appellants dismiss Bodiger's teaching that all conventional phosphorus compounds may be used as the flame retardant in combination with the finely divided inorganic oxides by asserting that 'the flame resistance of a phosphazene containing composition is not measurably improved by the inclusion of finely divided inorganic powders therein' (brief page 7). In support, appellants refer to Table 27 of their specification. We are not persuaded of a lack of motivation to combine the teachings of the applied references based on that line of rebuttal argument and evidence. In this regard we agree with the examiner that the data presented in appellants' Table 27 does not establish that adding finely divided inorganic powders to the molding composition of

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Maruyama would result in a lack of measurable improvement in enhancing the flame retardant properties thereof. Indeed, appellants acknowledge that good flame resistance is obtained for the two Examples employing the added finely divided inorganic powder notwithstanding the markedly reduced phosphazene content employed in the molding composition of those examples compared to the comparative Example. See page 27, lines 8-10 of appellants' specification. Consequently, appellants' argument (reply brief, pages 2 and 3) that the decrease of phosphazene content between the particular molding composition of comparison Example 1 and the finely divided inorganic powder containing molding compositions of Examples 2 and 3 is minimal is inconsistent with appellants' statement in the specification and not persuasive of any error of the examiner's obviousness position. In this regard, it is not clear how Examples 2 and 3 can be fairly compared with comparative Example 1 regarding the effect of adding inorganic powders of the flame inhibition properties of the particular molding compositions tested given the 'percentage' difference in amount of phosphazene flame retardants used in those examples. Moreover, we note that the single comparison example without finely divided inorganic powder addition together with the two examples with the additive powder presented in that Table is a showing which is clearly considerably more narrow in scope than the claimed subject matter. Thus the relied upon evidence falls significantly short of discrediting the examiner's position that one of ordinary skill in the art at the time of the invention would have been led by the teachings of Bodiger and Maruyama to add finely divided inorganic powders to the molding composition of Maruyama with the reasonable expectation that such

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would result in enhancing the flame retardant thereof based on the combined teachings thereof as discussed above and in the answer." The examiner agrees. Neither Dr. Eckel's Declaration, nor Mr. Franks' argument address any of this. Since the additional flame retardants of Mitsubishi Chemical (Maruyama) are only optional ingredients they do not have to be present and accordingly, their effect on the composition of Mitsubishi Chemical is irrelevant. The only question is whether is it obvious to add the finely divided inorganic powders of Bodiger et al. to the polycarbonate, graft copolymer, aromatic vinyl polymer, phosphazene, PTFE composition of Mitsubishi Chemical or not. Since the addition of the finely divided inorganic powder improves the flame retardance of all phosphorus containing thermoplastic compositions the answer has to be in the affirmative. The effects of phosphazenes on the notched impact strength of polycarbonate, since phosphazenes are specified by Mitsubishi Chemicals, is not germane to the motivation statement of the rejection and as such is immaterial. The rejection is maintained.

Double Patenting

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

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Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6. Claims 2-15, 18,20 and 22-24 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-25 of copending Application No. 10/220,591. Although the conflicting claims are not identical, they are not patentably distinct from each other because all ingredients claimed by applicants are claimed in the copending application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Szekely whose telephone number is (571) 272-1124. The examiner can normally be reached on 7:00 a.m.-5:30 p.m. Tuesday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Peter Szekely
Primary Examiner
Art Unit 1714

P.S.
4/21/05